REMARKS

Claims 1-33 are pending in the application. By this Amendment, Applicants have amended claims 1-33 for clarity.

In the Examiner's Office Action mailed April, 25, 2001, the Examiner states that the action is a response to an amendment that was received by the Office on November 30, 2000. Applicants, however, believe the Examiner is referring to Applicant's last communication, an amendment submitted to the Office on November 24, 1999, and that the above date was a typographical error. If Applicants are incorrect about the dates of the above-mentioned communications, the Examiner is asked to contact Applicants' undersigned representative to clarify this matter.

In the last Office Action, the Examiner rejected all of the pending claims as follows: First, claims 1-33 were rejected under 35 U.S.C. § 112, first paragraph, as lacking support. Second, claims 1, 4, 11, 14, 21, and 24 were rejected under 35 U.S.C. § 102(e) as being anticipated by Hill et al. (U.S. Patent No. 5,511,197). Third, claims 31-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Betz, "Interoperable Objects: Laying the Foundation for Distributed-Object Computing" in view of the Hill patent. Fourth, claims 3, 7-10, 13, 17-20, 23, and 27-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Hill patent in view of Birrell et al., "Network Objects." Lastly, claims 2, 5, 6, 12, 15, 16, 22, 25, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Hill patent in view of Mitchell et al., "An Overview of the Spring System." Applicants respectfully traverse these rejections.

Regarding the § 112, first paragraph, rejection of claims 1-33, the Examiner states that support cannot be found within Applicant's specification for a definition of

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

"stub code." Although Applicants contend that the claims as submitted in the last amendment are patentable, in order to put the application in condition for allowance, Applicants have amended claims 1-33 to delete the word "code" following the word "stub." Applicants make this deletion only to place the claims in condition for allowance and nevertheless contend that the previously submitted amendment contained patentable claims. Accordingly, claims 1-33 do not lack support.

In the second rejection, the Examiner rejected claims 1, 4, 11, 14, 21, and 24 under § 102(e) as anticipated by the Hill patent. However, these claims as amended are patentable over the Hill patent because the Hill patent does not teach or suggest a stub code loader or method where "stub code is received by said stub code retriever from said server" or "stub code is received from said server" and loaded "into said execution environment, thereby to make the stub code available for use in said remote invocation of said remote method," as recited in claims 1, 11, and 21.

In contrast, the Hill patent is directed to a method and system for passing pointers to objects between processes. See col. 1, lines 11-14. Accordingly, the Hill patent describes sending an interface pointer from a server object in a server process to a client process. To do so, the server process creates an object that has multiple interfaces and identifies an interface to pass to the client process. The server process then creates an object stub, an object interface, and a stub channel corresponding to the interface. The server process directs the stub channel to send an identifier of the interface to the client process. When the client process receives the identifier of the interface, it creates an object proxy, an interface proxy, and a proxy channel. The interface proxy receives requests to invoke function members of the interface and the

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

server's stub channel forwards the request to the appropriate interface stub which unpacks time parameters and invokes the corresponding method of the packaged interface. See col. 5, line 60 - col. 6, line 9.

The Hill patent does not teach or disclose retrieving stub code from the server; instead, the proxy is created from a dynamic link library that resides on the client system. In the Hill patent, it is the client process - not the server process - that originates the object proxy in response to an interface pointer. Accordingly, claims 1, 11, and 21 are patentable over the Hill patent.

Claims 4, 14, and 24 depend from independent claims 1, 11, and 21, respectively, discussed above. Because the reference neither teaches nor suggests every element of the independent claims, Hill cannot anticipate dependent claims 4, 14, and 24. Therefore, Applicants respectfully request that the rejections of claims 1, 4, 11, 14, 21, and 24 be withdrawn.

In the third rejection, the Examiner rejected claims 31-33 under 35 U.S.C. § 103(a) as being unpatentable over the Betz reference in view of the Hill patent. This rejection, however, suffers from the same problem as the previous rejection in that the cited references fail to teach or suggest receiving stub code "from said server in response to said stub code retrieval module" as recited in claims 31-33.

Claims 31-33 recite "a stub code loader module configured to control said computer to, when said stub code is received from said server in response to said stub code retrieval module, load said stub code into said execution environment, thereby to make the stub code available for use in said remote invocation of said remote method." Thus, claims 31-33 as amended recite retrieving stub code "from said server"

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

associated with the remote method to facilitate the remote invocation of the remote method.

The Betz reference describes a number of distributed object-oriented computing systems. However, as admitted by the Examiner, the Betz reference does not teach retrieving a stub from a server associated with the processing of a remote method (Office Action, April 25, 2001, at page 4). Furthermore, the Hill patent, as described above, also does not provide such a teaching or suggestion. Accordingly, no reasonable combination of the Betz reference and the Hill patent teaches or suggests "a stub code loader module configured to control said computer to, when said stub code is received from said server in response to said stub code retrieval module, load said stub code into said execution environment," as recited by claims 31-33. Thus, claims 31-33 are patentable over the cited references.

In the fourth rejection, the Examiner rejected claims 3, 7-10, 13, 17-20, 23, and 27-30 under 35 U.S.C. § 103(a) as being unpatentable over the Hill patent in view of Birrell reference. All of the claims in this group are dependent claims that depend from independent claims previously discussed. Thus, these claims are patentable at least because of their dependence on allowable independent claims.

Lastly, the Examiner rejected claims 2, 5, 6, 12, 15, 16, 22, 25, and 26 under 35 U.S.C. § 103(a) as being unpatentable over the Hill patent in view of the Mitchell reference. All of these claims are dependent claims that depend on independent claims previously discussed. Thus, these claims are patentable at least because of their dependence on allowable independent claims. In addition, Applicants note that these dependent claims include limitations not disclosed or suggested by the references.

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-33 in condition for allowance. Applicants submit that the proposed amendments of claims 1-33 do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

Furthermore, Applicants respectfully point out that the final action by the Examiner presented some new arguments as to the application of the art against Applicant's invention. It is respectfully submitted that the entering of the Amendment would allow the Applicants to reply to the final rejections and place the application in condition for allowance.

Finally, Applicants submit that the entry of the amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

In view of the foregoing remarks, Applicants submit that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicants therefore request the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: July 24, 2001

By: William J. Brogan Reg No. 43,515
for Jeffrey A. Berkowitz
Reg. No. 36,743

LAW OFFICES
FINNEGAN, HENDERSON, FARABOW, GARRETT, & DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000